

Product display stand

The present invention relates to product display stands.

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More particularly, the invention relates to a stand for displaying products, comprising:

- a supporting cabinet which has an at least partially open front face and a rear face,

10 - at least one drawer slidably mounted horizontally in the supporting cabinet between a retracted position and an extended position where said drawer is displaced toward the front face of the supporting cabinet, said drawer being suitable for  
15 containing at least some of said products and having a front end oriented toward the front face of the supporting cabinet.

It is thus possible to store packaged products in the  
20 drawer, which allows easy access to these products if required.

However, when another person has arranged the stand it is difficult to know in which drawer these packaged  
25 products are located. Furthermore, a range of products is often packaged in a very similar manner, differing only by a small amount of text, so that it may then be necessary to look for the desired product in many drawers.

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The object of the present invention is, in particular, to alleviate these drawbacks.

To this end, according to the invention, a product  
35 display stand is provided which, apart from the aforementioned features, is essentially characterized in that it further comprises at least one adjustable display unit which is pivotably mounted by connecting

means, on the front end of the drawer about a horizontal pivot axis substantially parallel to the front face of the supporting cabinet, locking means being provided for selectively locking the display unit  
5 relative to the drawer, said display unit being suitable for displaying at least one sample of said products, the stand being arranged so that a person standing in the vicinity of the front face of the supporting cabinet may see the contents of the display  
10 unit.

By virtue of these arrangements, representative samples of the products arranged in the drawer are placed on a display unit directly connected to the drawer, so that  
15 it is possible to know where to look for a product corresponding to the sample.

By hinging the display unit to the drawer, it is also possible to adapt more easily to the external  
20 constraints of the layout that are associated, for example, with the positioning of the stand as a whole.

The products of the drawer may also be packaged individually so that it is possible to store said  
25 products in large numbers in the drawer and to display the unpackaged samples of the display unit so that external observers may have an accurate representation of the products.

30 In preferred embodiments of the invention, moreover, it is possible to use either one and/or another of the following arrangements:

- the display unit is configured to allow pivoting between a first position where said display unit  
35 extends substantially horizontally and a second position where said display unit extends downward from the drawer;

- the display unit has a lower face equipped with illuminating means;

- the display unit comprises:
    - . a shelf having an upper face, and
    - . a block suitable for displaying said at least one sample and having a lower face suitable for cooperating with said upper face of the shelf in order to fix said block to said shelf;
  - said lower face of the block cooperates releasably with said upper face of the shelf;
  - the block comprises an upper face provided with cells suitable for receiving said samples;
  - the locking means comprise a part of the drawer and a part of the display unit cooperating by friction;
  - the display unit and the drawer are hinged by a journal connected to the display unit and by a front part of the drawer relative to which the journal is suitable for being able to pivot, the journal comprises a plurality of housings and the locking means comprise:
    - . at least one rod fixed in rotation to the drawer and suitable for sliding relative to the journal between a locked position and an unlocked position, and
    - . at least one tooth fixed to the rod suitable for cooperating selectively with one of said housings in the locked position and for being removed from said housing in the unlocked position;
  - the drawer comprises, in the vicinity of its front end, a display portion suitable for containing at least one sample of said products, the stand being arranged so that a person in the vicinity of the front face of the supporting cabinet may see the display portion of the drawer;
  - the drawer further comprises, at the rear of the display portion, a storage portion suitable for containing at least some of said products.
- Further features and advantages of the invention will appear from the following description of one of its embodiments, given by way of non limiting example, with reference to the accompanying drawings, in which:

- Figure 1 is a lateral view of a stand according to the invention;

- Figure 2 is a perspective view of a drawer and a display unit according to the invention;

5       - Figure 3 shows a partial section of a hinge mechanism of a drawer and a display unit, such as those shown in figure 2, along the pivot axis;

      - Figure 4 shows the same section of a further hinge mechanism in an intermediate position between a  
10   locked position and an unlocked position; and

      - Figure 5 is a perspective view of a drawer and a display unit according to a variant of the invention.

Figure 1 shows a stand having a supporting cabinet 13  
15   placed on the floor. The stand comprises a front face provided, for example, with a transparent element 25 such as a sheet of glass or suitable plastic, able to be selectively opened or closed, for example by sliding along a direction at right angles to the cutting plane  
20   of figure 1 in order to allow access to the interior of the stand. The stand also comprises a rear face 13a which is, for example, vertical and rigid. A certain number of supports 2 are fixed above one another on the rear face of the stand, in a rigid manner. They are,  
25   for example, arranged horizontally.

These supports 2 are each suitable for movably receiving a device 1 receiving products 10 (see figure 2) to be stored. The device 1 comprises, in particular,  
30   a drawer 8 which may slide relative to the support 2 toward the front face of the stand in an extended position, and toward the rear face in a retracted position. A display unit 3 is hinged on the front face of each drawer about an axis perpendicular to the plane  
35   of figure 1, substantially parallel to the front and rear faces of the stand.

It should be noted in particular that the supports 2 may differ in size from one another, and may receive

drawers 8 of variable sizes and relative to which the respective display units are inclined in different directions. It is therefore possible for different types of products to be received, displayed and stored  
5 in the same stand. The display units 3 may be equipped with a lighting element 11, such as a lamp, on their lower face and the inclination of the upper display units may be adjusted so that said lamp 11 provides overall illumination of the display unit immediately  
10 below.

The stand may, for example, have a front face inclined toward its rear face and, on moving up the stand, the supports 2 may be increasingly short. On moving up the  
15 stand, therefore, the display units may be increasingly inclined, with the lowest display unit being arranged substantially horizontally.

Figure 2 shows in more detail a product display device  
20 1, the drawer being at least partially positioned on the support 2.

The display unit 3 comprises at least one portion for displaying samples for displaying the features of the  
25 available product or products, easily visible to a user in a first direction  $y_1$ , perpendicular to the general plane of the display unit and generally inclined to the vertical.

30 The display unit 3 further comprises a gripping portion 26 that may be grasped and pulled to bring the device 1 toward a user.

The drawer 8 comprises a storage portion 4 containing  
35 one or more examples of the products displayed by the display portion, arranged, for example, vertically. These products are visible to the user in a substantially vertical direction  $y_2$ , principally when

the drawer is pulled toward the front face of the stand.

5 The display unit 3 and the drawer 8 are connected to one another by connecting means 5 placed near a front end of the drawer. This connection allows the inclination of the display unit 3 to be adjusted, for example to facilitate the display of the display portion to various external observers or to be adapted to the layout of the stand. Examples of these connecting means will be detailed below.

15 In the example of figure 2, the display unit 3 principally comprises a shelf 23 of parallelepipedal shape having an upper face 23a turned toward an observer. The front face and a front part 23b of the upper face of the shelf 23 may, for example, also comprise information about the character or properties of the samples displayed.

20 In the embodiment shown, the samples are arranged on a block 7, itself of substantially parallelepipedal shape and of which one lower face 7a is positioned on the upper face 23a of the shelf 23.

25 The block 7 may be fixed to the shelf by a number of known techniques, such as:

30 - by snapping lugs (not shown) on the lower face 7a of the block into suitable apertures (also not shown) of the display unit,

- by means of magnets integrated into the block 7 and/or the shelf 23, these magnets cooperating with complementary magnets or ferromagnetic elements integrated respectively in the shelf 23 and/or the block 7,

- by combining these two techniques, or others.

The block 7 may therefore be releasably mounted on the shelf 23 in a simple manner, which has the effect of being able to use it to display various types of products successively.

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The upper face 7b of the block 7 may comprise cells 6, arranged in an ordered manner in rows and columns and suitable for receiving representative samples of the products 10. Each sample may be an exact copy of a product displayed, or a simple reference displaying an important feature of the various products.

Alternatively, the upper face 7b of the block 7 may be planar and the samples may be, for example, disks of color adhered to said upper face in order to display, for example, lipsticks characterized by said color.

Alternatively, the samples are not displayed by means of a block 7, but may be directly arranged on the surface of the shelf 23 by any appropriate means.

The drawer 8 comprises a lower face 8b resting and sliding on the horizontal support 2 connected to the stand. The drawer 8 is suitable for receiving the products 10 of which the representative samples are displayed on the display unit 3. The products 10 may be packaged and ready to be taken away by an external observer. If the samples are arranged on the display unit in an ordered manner, the products 10 could, for example, be arranged in an identical or similar manner in the drawer 8, so as to be able to quickly find the product corresponding to the sample.

The samples are not necessarily designed solely to be viewed by an external observer - they may, for example, also be samples of perfume designed to be smelled by the external observer.

The device 1 may also have illuminating means, such as a lamp 11, on the lower face 23c of the shelf. Said illuminating means 11 may, for example, be supplied with power via electrical wires (not shown) extending  
5 from the lamp 11 to a rear end of the drawer 8 where they may be connected to a power supply. Alternatively, the device may contain a removable battery (not shown) connected to the lamp 11.

10 The display unit 3 and the drawer 8 are connected by connecting means 5 constituting a hinge, for example of the pivot type. Such a hinge may be produced by a wide variety of means. As shown in figure 3, it may be provided, for example, that a journal 17, fixed to the  
15 display unit 3, may turn selectively relative to the drawer 8 and in a manner suitable for maintaining the display unit 3 and the drawer 8 in position relative to one another, at a given inclination and when no force is applied to the display unit, by simple friction of  
20 the journal 17 and the drawer 8 at the hinge. The connecting means 5 further allow the inclination between the drawer 8 and the display unit 3 to be varied within an inclination range. This range extends, for example, between a horizontal position of the  
25 display unit and a position of the display unit inclined downward relative to the drawer by the order of 10 to 90 degrees. Within this range, the drawer and the display unit may be arranged in numerous intermediate relative positions.

30 Purely as an indication, a hinge mechanism is shown in figure 3. Other types of hinges allowing the same movement could, however, be used within the scope of the invention.

35 A journal 17 is fixed to the display unit 3 and has a cylindrical recess 17a in which one end 30 of the front part 16 of the drawer, of complementary shape, may turn under the action of a user. When the user exerts no



force on the display unit, the parts are locked relative to one another solely by the friction of the parts on one another.

- 5 A variant of the locking means consists in using a locking mechanism as shown in figure 4.

The journal 17, fixed to the display unit 3, has a cylindrical through-recess 17a extending along the  
10 pivot axis and an internal face 17b perpendicular to the pivot axis. It further comprises hollow housings 29 provided on its external face.

The front part 16 of the drawer 8 also has a  
15 cylindrical through-recess aligned with that of the journal when the display unit and the drawer are assembled. It is further provided with a chamber 27, of noncylindrical, for example square, section.

20 The mechanism also comprises a cylindrical button 21 equipped with teeth 14 arranged at regular angular intervals on the internal face 21a of the button 21 and of a form complementary to the housings of the external face of the journal 17 and housed therein in the locked  
25 position.

The button 21 is mounted on a rod 15 suitable for sliding within the cylindrical recess 17a. The rod is also fixed to a flange 22. This rod carries a  
30 compression spring 20 of which a first end is in contact with the flange 22 and a second end is in contact with the internal face 17b of the journal. The rod has an enlarged end 19 of section complementary to the chamber 27 of the front face 16 of the drawer.

35 By means of these arrangements, only a translatory motion of the rod 15 relative to the drawer is permitted. To unlock the mechanism, the button 21 is displaced by an operator toward the left of figure 4

counter to the bias of the spring 20 and the teeth 14 are released from the corresponding housings of the journal. The journal 17 and the display unit may then turn freely relative to the front face 16 of the drawer, for example, under the action of the operator. Once the desired orientation is achieved, the hinge may be locked again by releasing the button 21 which is returned to the locked position by the spring 20.

Figure 5 shows a second embodiment of the device 1, repeating most of the features described above. In this second embodiment, the drawer 8 comprises a storage portion 4, as described above, and may also comprise a second display portion 12, of similar type to the first display portion described above.